CITY OF DUBLIN • BUILDING & SAFETY DIVISION

100 Civic Plaza, Dublin, California 94568

Website: http://www.dublin.ca.gov
Phone: **(925) 833-6620**
Fax: (925) 833-6628

Domestic Clothes Dryer Vents

2010 California Mechanical Code
SECTION 504.3 - CLOTHES DRYERS

504.3.1 Moisture Exhaust Ducts. Moisture exhaust ducts for domestic clothes dryers shall terminate on the outside of the building and shall be equipped with a back-draft damper. Screens shall not be installed at the duct termination. Ducts for exhausting clothes dryers shall not be connected or installed with sheet metal screws or other fasteners that will obstruct the flow. Clothes dryer moisture exhaust ducts shall not be connected to a gas vent connector, gas vent or chimney. Clothes dryer moisture exhaust ducts shall not extend into or through ducts or plenums.

504.3.2 Domestic Clothes Dryers. When a compartment or space for domestic clothes dryer is provided, a minimum 4-inch diameter (102mm) moisture exhaust duct of approved material shall be installed in accordance with this Section and Section 504.

504.3.2.1 Domestic Dryer Vent. Domestic clothes dryer moisture exhaust ducts shall be of metal and shall have smooth interior surfaces.

> ***Exception:*** Listed clothes dryer transition ducts not more than 6 feet (1,829mm) in length may be used in connection with domestic dryer exhausts.
>
> Flexible clothes dryer transition duct connectors shall not be concealed within construction.

504.3.2.2 Length Limitation. Unless otherwise permitted or required by the dryer manufacturer's installations instructions, approved by the Building Official, domestic dryer moisture exhaust ducts shall not exceed a total combined horizontal and vertical length of 14 feet (4,267 mm), including two 90-degree elbows. Two feet (610 mm) shall be deducted for each 90-degree elbow in excess of two.

504.5 – Termination of Environmental Air Ducts. Environmental air ducts exhaust shall terminate a minimum of three (3) feet (914mm) from property line and three (3) feet (914mm) from openings into the building.

504.6 Gypsum Wallboard Ducts. Bathrooms and laundry room exhaust ducts may be of gypsum wallboard subject to limitations of other sections of the code. (CMC section 602.1)

Alternatives to Section 504.3.2, UMC

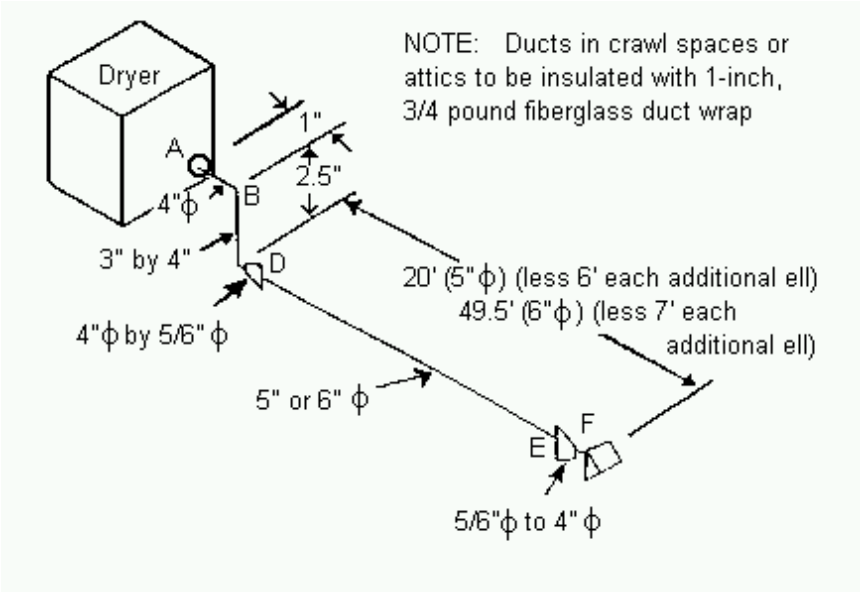

Figure No. 2

ALTERNATE CALCULATION SHEET FOR FIGURE NO. 2

Dryer Vent Calculations, Underfloor, Engineered Equivalent:

SECTION	ITEM	SIZE (inches)	LENGTH (feet)	*f*'/FEET or "C"	VELOCITY (fpm)	VELOCITY PRESSURE (inches W.G.)	PRESSURE DROP (inches W.G.)
A-B	Duct	4	1.0	0.0100	1,400	---	0.01
B	Ell	4 to 3 by 4	---	0.4200	1,400	0.12	0.05
B-C	Duct	3 by 4	2.5	0.0100	1,400	---	0.02
C	Ell	3 by 4 to 4	---	0.4200	1,400	0.12	0.05
C-D	Transition	4 to 5	---	0.1900	1,400	0.12	0.02
D-E	Duct	5	20.0	0.0032	875	---	0.06
E-F	Transition	5 to 4	---	0.0500	1,400	0.12	0.01
F	Outlet	4	---	0.5500	1,400	0.12	0.07
			23.5				0.29

SECOND ALTERNATE CALCULATION SHEET FOR FIGURE NO. 2

Dryer Vent Calculations, Underfloor, Engineered Equivalent:

SECTION	ITEM	SIZE (inches)	LENGTH (feet)	*f*'/FEET or "C"	VELOCITY (fpm)	VELOCITY PRESSURE (inches W.G.)	PRESSURE DROP (inches W.G.)
A-B	Duct	4	1.0	0.0100	1,400	---	0.01
B	Ell	4 to 3 by 4	---	0.4200	1,400	0.12	0.05
B-C	Duct	3 by 4	2.5	0.0100	1,400	---	0.02
C	Ell	3 by 4 to 4	---	0.4200	1,400	0.12	0.05
C-D	Transition	4 to 6	---	0.1900	1,400	0.12	0.02
D-E	Duct	6	49.5	0.0013	625	---	0.06
E-F	Transition	6 to 4	---	0.0500	1,400	0.12	0.01
F	Outlet	4	---	0.5500	1,400	0.12	0.07
			53.0				0.29

CALCULATION SHEET FOR FIGURE NO. 3

Dryer Vent Calculations, Overhead, Per Code:

SECTION	ITEM	SIZE (inches)	LENGTH (feet)	*f*'/FEET or "C"	VELOCITY (fpm)	VELOCITY PRESSURE (inches W.G.)	PRESSURE DROP (inches W.G.)
A-B	Duct	4	1.0	0.01	1,400	---	0.01
B	Ell	4	---	0.37	1,400	0.12	0.04
B-C	Duct	4	8.0	0.01	1,400	---	0.08
C	Ell	4	---	0.37	1,400	0.12	0.04
C-D	Duct	4	5.0	0.01	1,400	---	0.05
D	Outlet	4	---	0.55	1,400	0.12	0.07
			14.0				0.29

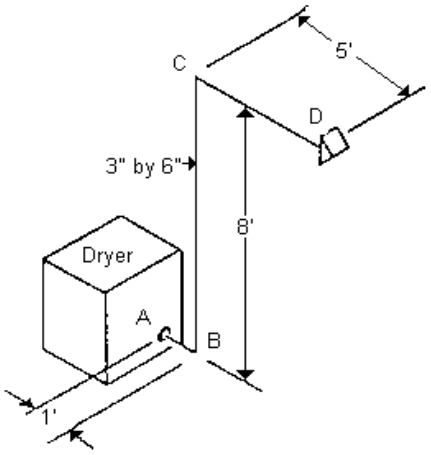

Figure No. 3

CALCULATION SHEET FOR FIGURE NO. 4

Dryer Vent Calculations, Overhead, Engineered Equivalent:							
SECTION	ITEM	SIZE (inches)	LENGTH (feet)	*f*'/FEET or "C"	VELOCITY (fpm)	VELOCITY PRESSURE (inches W.G.)	PRESSURE DROP (inches W.G.)
A-B	Duct	4	1.0	0.0100	1,400	---	0.01
B	Ell	4 to 3 by 6	---	0.4200	1,400	0.12	0.05
B-C	Duct	3 by 6	8.0	0.0052	1,070	---	0.04
C	Ell	3 by 6 to 5	---	0.4200	1,070	0.07	0.03
C-D	Duct	5	28.5	0.0032	875	---	0.09
D-E	Transition	5 to 4	---	0.0500	1,400	0.12	0.01
E	Outlet	4	---	0.5500	1,400	0.12	0.07
			37.5				0.29

ALTERNATE CALCULATION SHEET FOR FIGURE NO. 4

Dryer Vent Calculations, Overhead, Engineered Equivalent:							
SECTION	ITEM	SIZE (inches)	LENGTH (feet)	*f*'/FEET or "C"	VELOCITY (fpm)	VELOCITY PRESSURE (inches W.G.)	PRESSURE DROP (inches W.G.)
A-B	Duct	4	1.0	0.0100	1,400	---	0.01
B	Ell	4 to 3 by 6	---	0.4200	1,400	0.12	0.05
B-C	Duct	3 by 6	8.0	0.0052	1,070	---	0.04
C	Ell	3 by 6 to 6	---	0.4200	1,070	0.07	0.03
C-D	Duct	6	70.0	0.0013	625	---	0.09
D-E	Transition	6 to 4	---	0.0500	1,400	0.12	0.01
E	Outlet	4	---	0.5500	1,400	0.12	0.07
			79.0				0.29

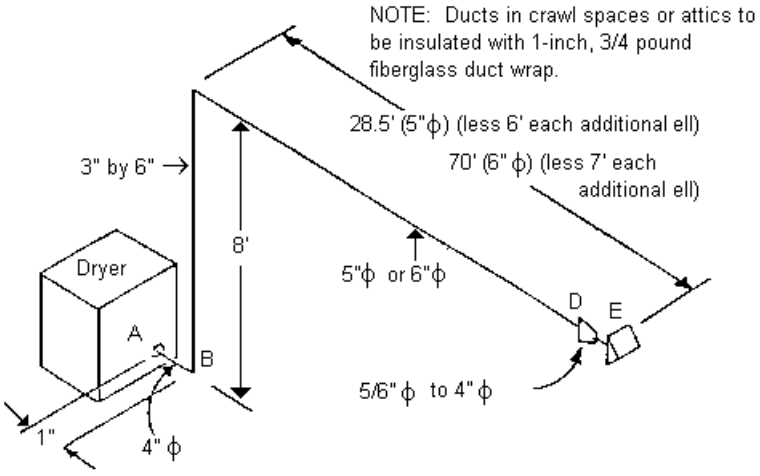

Figure No. 4